

Serial No. 09/680.089 Examiner Alavi

Filing Date: October 5, 2000

- (Currently Amended) Method of determining a colouror formula for matching 1. a selected colouror measured with an electronic imaging device, which method comprises the following steps:
 - a) an electronic imaging device is calibrated by measuring the colouror signals of at least two calibration coleurors, the colorimetric data of each of the calibration colourors being known;
 - b) at the same time or in a next step the selected colouror is measured with the aid of the electronic imaging device;
 - c) using a mathematical model, parameters are calculated for converting the measured colouror signals of the calibration colourors to the known colorimetric data:
 - d) using the mathematical model and the calculated parameters, the colouror signals of the measured selected colouror are converted to colorimetric data; and
 - e) using a databank, the colouror formula of which the colorimetric data most closely matches the calculated colorimetric data of the measured selected colouror is determined.
- (Currently Amended) A method according to claim 1, characterised in that 2. the calibration coleurors are distributed over the entire colorimetric coleuror space.
- (Currently Amended) A method according to claim 2, characterised in that 3. the calibration colourors are distributed in the vicinity of the selected colouror.

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Serial No. 09/680,089 Examiner Alavi Filing Date: October 5, 2000

(Currently Amended) A method according to any of claims 1-3, characterised in that the calibration coleurors in the vicinity of the selected coleuror are given greater weight when calculating the model parameters.

(Original) A method according to any of claims 1-3, characterised in that the electronic imaging device is a flatbed scanner.

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(Original) A method according to one or more of preceding claims 1-3, characterised in that the electronic imaging device is a digital camera.

(Currently Amended) A method according to one or more of claims 1-3, characterised in that the measurement of the calibration coleurors and the selected coleuror takes place simultaneously.

(Currently Amended) A method according to any of claims 1-3, characterised in that texture parameters can be calculated from the recording of the selected colouror and that by using a databank the colouror formula can be determined of which the texture parameters most closely match the calculated texture parameters of the measured selected colouror.

(Original) A method according to claim &, characterised in that a ruler is provided on the calibration pattern.

(Currently Amended) A method of determining a texture and/or colouror formula for matching a selected colouror and/or texture of a selected material in which

- a) the colouror of the selected material is measured with a spectrophotometer or a tri-stimulus meter;
- b) the texture of the selected material is measured with an electronic imaging device; and

Serial No. 09/680,089 Examiner Alavi Filing Date: October 5, 2000

c) the measured coleuror and texture data are used to determine, in a databank, the texture and/or coleuror formula of which the colorimetric data and the texture data most closely match those of the selected material.

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刊. (Currently Amended) A method according to any one of claims 1-3, 9 or 10, characterised in that wherein the method is carried out in the car repair industry.

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(Currently Amended) A method according to any one of claims 1–3, 9 or 10, wherein characterised in that additional information is provided during recording of the selected coleuror with the electronic imaging device.

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(Currently Amended) A method of determining the colouror difference of a selected colouror measured with an electronic imaging device compared to a standard colouror sample, which method comprises the following steps:

- a) an electronic imaging device is calibrated by measuring the colouror signals of at least two calibration colourors, the colorimetric data of each of the calibration colourors being known;
- b) at the same time or in a next step the selected colouror is measured with the aid of the electronic imaging device;
- using a mathematical model, parameters are calculated for converting the measured coleuror signals of the calibration coleurors to the known colorimetric data;
- d) using the mathematical model and the calculated parameters, the coleuror signals of the measured selected coleuror are converted to colorimetric data; and
- e) the colorimetric data of the selected colouror are compared to the colorimetric data of a standard colouror sample.

Serial No. 09/680,089 Examiner Alavi Filing Date: October 5, 2000

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(New) A method according to claim 3, wherein_the method is carried out in the car repair industry.

1 (New) A method according to claim , wherein_the method is carried out in the car repair industry.

1// 16. (New) A method according to claim 16, wherein_the method is carried out in the car repair industry.

(New) A method according to claim 3, wherein additional information is provided during recording of the selected color with the electronic imaging device.

18. (New) A method according to claim 3, wherein additional information is provided during recording of the selected color with the electronic imaging device.

18. (New) A method according to claim 10, wherein additional information is provided during recording of the selected color with the electronic imaging device.